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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/661,631	09/15/2003	Kazumasa Yoshida	117188	7913

25944 7590 08/25/2005

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ALEXANDRIA, VA 22320

EXAMINER

RACHUBA, MAURINA T

ART UNIT	PAPER NUMBER
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3723

DATE MAILED: 08/25/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

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Office Action Summary	Application No. 10/661,631	Applicant(s) YOSHIDA ET AL.	
	Examiner M Rachuba	Art Unit 3723	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 15 August 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-9 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 9 is/are allowed.
- 6) ☒ Claim(s) 1-5, 7 and 8 is/are rejected.
- 7) ☒ Claim(s) 6 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 15 September 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. Applicant's arguments, see page 6, lines 1-2, filed 15 August 2005, with respect to the common ownership of the pending application and Yoshida '641 have been fully considered and are persuasive. The final rejection of claims 1-5, 7 and 8 has been withdrawn. However, upon further consideration, a new ground(s) of rejection is made in view of newly found Asaeda, '657, as set forth below.

Claim Rejections - 35 USC § 103

2. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

3. Claims 1, 4, 7, and 8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Applicant's admitted prior art, pages 2 and 3 of the specification, in view of Asaeda et al, US004446657A. Applicant admits as prior art "However, where the annular core body of the vitrified grinding wheel is provided by a resinoid structure in which aggregate particles such as silicon carbide and alumina are held together by a resin bond, there is a problem that abrasive segment chips 50 (cooperating with each other to constitute an abrasive layer) have cracks 52, as shown in Fig. 5, after its long-time use or storage. An extensive study by the present inventor revealed that the problematic cracks are caused by change in the volume of the annular core body which is subjected to a cutting fluid used in a grinding operation or a moisture contained in the atmosphere." Applicant's admitted prior art does not disclose an impermeable coating which is formed of a synthetic resin and which covers a surface of the annular core body. '657, in a similar grinding tool, teaches providing a porous annular core body with

a resin coating 12. It would have been obvious to have provided applicant's admitted prior art with the synthetic resin coating taught by '657, column 2, lines 59 through column 3, lines 21, to prevent coolant with in the support member during use.

4. Claims 2 and 3 are rejected under 35 U.S.C. 103(a) as being unpatentable over Applicant's admitted prior art in view of Asaeda '657 as applied to claim 1 above, and further in view of Feeley, '105. Applicant's admitted prior art as modified by '657 does not disclose a grinding tool with embedded glass fabric sheets arranged perpendicularly and axially to form the annular core body. '105, in a grinding tool, teaches providing a grinding tool with embedded glass fabric sheets, arranged perpendicularly and axially to form an annular core body, the fabric bonded with an epoxy or phenol resin. It would have been obvious to have provided Applicant's admitted prior art as modified by '657 with the glass fabric sheet reinforcement as taught by '105, column 3, lines 7-11, to provide a light weight, reinforced tool that can operate at high rotary speed.

Allowable Subject Matter

5. Claim 9 is allowed.

6. Claim 6 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Response to Arguments

7. Applicant's arguments with respect to claims 1-5, 7 and 8 have been considered but are moot in view of the new ground(s) of rejection.

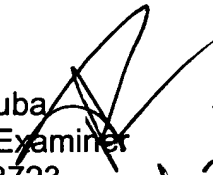
Conclusion

8. This action is made **non-final** to allow applicant opportunity to respond.
9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to M Rachuba whose telephone number is 571-272-4493. The examiner can normally be reached on Monday-Fridays.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Joseph Hail can be reached on 571-272-4485. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

M Rachuba
Primary Examiner
Art Unit 3723


8/22/03